

WHAT IS CLAIMED IS:

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1. A multiplexer transmitting data as a cell through a cell transmission path, said multiplexer comprising:

10 a first delay-fluctuation adding unit adding a first maximum value of delay fluctuation occurring when said multiplexer transmits the cell, to a predetermined area of the cell;

15 a second delay-fluctuation adding unit adding a second maximum value of delay fluctuation occurring when said multiplexer reproduces the data from the cell, to said predetermined area;

20 a storage unit storing the data; and a data-read control unit controlling reading the data stored in said storage unit by following a maximum value of delay fluctuation stored in said predetermined area.

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30 2. The multiplexer as claimed in claim 1, wherein said first delay-fluctuation adding unit adding said first maximum value of delay fluctuation occurring when said multiplexer transmits the cell to a next multiplexer on the cell transmission path and a third maximum value of delay fluctuation occurring on the cell transmission path between said multiplexer and said next multiplexer, to said predetermined area.

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3. The multiplexer as claimed in claim 1,
wherein said data-read control unit delaying timing
to read the data stored in said storage unit based
on said maximum value of delay fluctuation, thereby
5 absorbing the delay fluctuation.

10 4. The multiplexer as claimed in claim 3,
wherein said data-read control unit having to delay
said timing only once after a setting of the cell
transmission path.

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5. A method of controlling absorption of
delay fluctuation of data transmitted as a cell
20 through a plurality of relay stations, said method
comprising the steps of:

adding a maximum value of delay
fluctuation of each relay station to a predetermined
area of the cell that is to be transmitted through
25 the plurality of relay stations;

storing a received cell at a relay
station; and

reading the received cell by following the
maximum value of delay fluctuation stored in the
30 predetermined area of the received cell, thereby
absorbing the delay fluctuation of the received
cell;

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6. The method as claimed in claim 5,

comprising the step of adding the maximum value of delay fluctuation to said predetermined area of the cell at each relay station.

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7. The method as claimed in claim 5, comprising the steps of:

10 storing the data included in said received cell in a storage;

setting timing to read the data from the storage by following the maximum value of delay fluctuation stored in said predetermined area of the
15 received cell; and

reading the data from the storage by following said timing, thereby absorbing the delay fluctuation of the data.

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8. The method as claimed in claim 7, comprising the step of delaying the timing to read
25 the data from the storage by following the maximum value of delay fluctuation stored in said predetermined area of the received cell.